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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/514,369 | 02/28/2000 | Takayuki Shinohara | 49657-625 | 9468 |

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EXAMINER

LEI, TSULEUN R

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| ART UNIT | PAPER NUMBER |
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2684

DATE MAILED: 09/25/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/514,369

Applicant(s)

SHINOHARA ET AL.

Examiner

T. Richard Lei

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3,4,5,6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuroda et al. (U.S. Patent 5,444,664) in view of Robinson et al. (U.S. Patent 6,154,788).

Regarding Claim 1, Kuroda teaches a memory system for a portable telephone (Col.5, Lines 11-14) including a signal transmission/reception portion for transmitting and receiving a signal and a control portion for controlling at least a signal transmission and reception operation of said transmission/reception portion, comprising a file storage flash memory (Fig.41, FLASH) for storing a program for said control portion and at least transmission and reception data in a non-volatile manner under a control of said control portion. Jha does not disclose that the memory system also contain a random access memory. Robinson, however, teaches that a random access memory (Robinson, Fig.4, RAM MEMORY 430) providing a working area for said control portion. Therefore, it would have obvious to one of ordinary skill in the art at the

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time the invention was made to combine the teachings of Kuroda and Robinson so that RAM memory would be added to the FLASH memory to enhance its performance and functionality.

Regarding Claim 2, Kuroda and Robinson teach the memory system for the portable telephone according to claim 1, wherein said random access memory and said file storage flash memory are coupled to an internal bus (Kuroda, Fig.41, and Robinson, Fig.4, bus 402) interconnecting said control portion and said signal transmission/reception portion.

Regarding Claim 3, Kuroda and Robinson teach the memory system for the portable telephone according to claim 2, further comprising a bus converting circuit (Robinson, Fig.4, INTERFACE 404) connected between said file storage flash memory and said internal bus and functioning as an interface circuit for said file storage flash memory.

Regarding Claim 6, Kuroda and Robinson teach the memory system for the portable telephone according to claim 1, wherein said control portion, said random access memory and said file storage flash memory are integrally formed as a control unit (Kuroda, Fig.41, and Robinson, Fig.4, #400).

Regarding Claim 4, Kuroda and Robinson teach the memory system for the portable telephone according to claim 3, wherein said file storage flash memory and said bus converting circuit are integrally formed into a memory card attachable and detachable (Robinson, Fig.4, #400) to and from said portable telephone.

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Regarding Claim 5, Kuroda and Robinson teach the memory system for the portable telephone according to claim 3, wherein said file storage flash memory is constituted of a memory card (Robinson, Fig.2, FLASH CARD 213) being attachable and detachable to and from said bus converting circuit.

Regarding Claim 7, Kuroda and Robinson teach the memory system for the portable telephone according to claim 1, wherein said file storage flash memory comprises an AND type flash memory (Kuroda, Col.9, Lines 43-47).

Regarding Claim 8, Kuroda and Robinson teach the memory system for the portable telephone according to claim 5, wherein said bus converting circuit is formed into an adapter attachable and detachable to said portable telephone (Robinson, Fig.2, 213).

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Jha et al. (U.S. Patent 6,407,949) teaches a mobile communication device with integrated embedded FLASH and SRAM memory.

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Jigour et al. (U.S. Patent 5,877,975) teaches an insertable/removable digital memory apparatus.

Robinson (U.S. Patent 6,260,102) teaches an interface for flash EEPROM memory arrays.

Robinson (U.S. Patent 6,279,069) teaches an interface for flash EEPROM memory arrays.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to T. Richard Lei whose telephone number is 703-305-4828. The examiner can normally be reached on 8:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dan Hunter can be reached on 703-308-6732. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-5403 for regular communications and 703-308-5403 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

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September 9, 2002

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FEDERAL BUREAU OF INVESTIGATION
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